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## ABSTRACT

Issues in the monitoring of educational quality through performance indicators are discussed in this paper. The first section discusses the management of quality in educational systems and identifies the general functions of performance indicators as quality assurance, development, and accountability. Indicator systems are discussed in the following sections, and the relationships among indicators, development, and accountability are addressed in the context of the South Australian educational review system. The primary purpose of the review is to report on performance with respect to specific practices across the system as a whole. Effective practice reviews are conducted in four domains: teaching and learning; organization and management; ethos and culture; and social justice. The final sections discuss the use of performance indicators for development and quality management purposes as part of a broad framework for monitoring educational quality. An educational review program based on group discussion, interviews, and observation assessed teaching and learning in 80 classrooms and management and organization in 17 schools. Findings indicate that the teaching and learning practices were stronger than those for management and organization. The recommendation is made for strengthening curriculum aspects of schooling, particularly planning, development, and review; delivery strategies; staff development; and management and review of development. Two figures are included. (8 references) (LMI)

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## MONITORING EDUCATIONAL QUALITY THROUGH PERFORMANCE INDICATORS FOR SCHOOL PRACTICE

Paper prepared for American Educational Research  
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**Education Department of South Australia**

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# **MONITORING EDUCATIONAL QUALITY THROUGH PERFORMANCE INDICATORS FOR SCHOOL PRACTICE**

## **Managing Quality In Education Systems**

### **Introduction**

This first section discusses the management of quality in education systems. Indicator systems are discussed in the section that follows and the relationship between indicators, development and accountability is addressed in the context of a system of education review that has recently been established in South Australia. The final sections of the paper discuss the development of performance indicators to serve both development and quality management purposes. These indicators have been developed as part of a broad framework for continuously monitoring and reviewing the quality of the education provided for students. Information from the indicators of effective school practices and functioning is discussed in the final

### **Quality Assurance or Quality Control?**

It is important to distinguish between quality management and quality control. Centralised systems have tended to depend on quality control as their primary means of quality assurance. Quality control in such systems can be characterised as:

- input orientated – as exemplified by its focus on administrative controls over inputs to the system. Most of the form-filling that we undertake in bureaucratic systems is designed to meet the purpose of control over inputs.
- inspection orientated – that is, inspection of the outputs to select out items which do not meet pre-defined product standards.

### **Quality Control Systems**

Most education systems have exercised some control over output. Typically this has taken the form of *inspection* of the outputs from the system. Inspection in education systems has taken one of two forms: the system-wide testing of student achievement, or the use of professional inspectors to assess the standard of student work (HMI, for example). Inspection systems are based on the principle of assessing whether the system 'got it right'. Inspection systems usually also attempt to provide some basic additional information so that operations may be changed to get it right next time.

Inspection systems are not primarily designed to *assure* quality outcomes. They attempt to 're-work' defective 'goods' through such processes as retaining students until they have reached a particular standard or by the non-certification of some students. In terms of quality control, uncertified students, that is those who leave school without any formal credentials, are a parallel in the education system to defective goods produced by a manufacturer and sold as 'seconds'. The manufacturer does not stamp such goods with their (quality) label. The existence of such unlabelled lines of products from manufacturers is usually a symptom of poor quality management.

### **Quality Management Systems**

The alternative to input controls and inspection systems are *quality management* systems. Quality management systems attempt to *assure* quality through the introduction of appropriate processes for the management and monitoring of operations. That is, they attempt to integrate the process of work with the necessary mechanisms for assuring quality at each stage of the process. Plans indicating clear objectives and strategies of how those are going to be achieved, review systems and audit procedures are basic components of quality management approaches.

To be effective such approaches must be a part of the every day activity of work groups. The *system* itself also requires a quality assurance mechanism. Systemic quality assurance is based on audit and review of operational units to ensure that they have the appropriate quality management structures, and the direct monitoring of outcomes. At the school-level this requires the introduction and maintenance of systems to continuously monitor the effectiveness of strategies and practices—the function of *action plans*.

Monitoring systems should be designed to provide frequent assessments of progress so that action to correct unintended effects can be taken at the first sign of things not working the way they were expected to. It is more important that the monitoring system be simple and that observations be made frequently, than always be guaranteed to give the right answer.

Although the quality of outcomes themselves need to be continuously monitored, the system is referred to as quality management because it aims to assure quality outcomes by insuring that the processes implemented lead to the intended intermediate outcomes in every aspect of the system's operation.

### **Quality Assurance in Devolved Systems**

Devolved systems require the introduction of quality assurance processes, because they do not have recourse to the quality control mechanisms provided by centralised administrative systems. The lack of such control systems is not considered a disadvantage, however, because the emphasis they place on inputs (as

is exemplified by the four signatures required, one for each step in the process, before a requisition reaches 'Stores Branch') is now considered inappropriate and counter productive. Management perspectives now almost universally emphasise the need to focus not on inputs, but on *outputs* and *outcomes*. This approach is widely accepted within the Education Department of South Australia, although there is still some distance to travel before it is fully implemented throughout all units and functions.

Effective management requires specific objectives, clear responsibility and quality assurance systems designed to access progress in meeting these objectives. Unclear or undefined objectives do not provide for clear delegation of responsibility. Individuals and groups can only be properly held accountable for achieving, or not achieving, specific objectives. In the absence of specific and clear objectives accountability becomes vague and unenforceable. Bureaucratic centralised systems fall back on the process of checking whether administrative instructions have been followed, rather than assessing how well educational objectives have been met. A centralised system necessarily operates by rules, set procedures and statute in order to reduce the number of problematic decisions that officials at the centre have to take. In the case of the education system these rules are of major as well as of minor scale and they militate against the overall co-ordination and responsiveness of the system.

These rules are frequently not only inappropriate and inflexible: they also create a multitude of administrative forms and bureaucratic arrangements which take time to produce, time to update, time to understand, and time to comply with (or avoid). Such an approach leads to a great deal of effort being devoted at all levels to rule making and rule breaking rather than to establishing goals and parameters for achievements and then setting out to achieve these.

Audit and review processes are fundamental to the delivery of high quality outcomes in devolved systems. Audit essentially serves accountability purposes, but also provides information from which specific types of systemic performance indicators can be constructed. Review, as indicated above, is important throughout all stages of the process of delivering high quality education to students. In fact, review—through continuous work place monitoring by every employee—is a basic component of the management of quality outcomes.

There is a false belief held by some supporters of devolved systems that such systems can be held accountable on the basis of outcomes and outputs alone, thus substantially removing the need for the review function. This assumes that clients will exercise judgement about the quality of the service provided and adjust their demand for the service in light of this. While this perspective is built on sound consumer demand theory it is somewhat irrelevant to the production of a quality service.

Three arguments can be put forward to substantiate the need for audit and review functions in a devolved state education system. First, accountability to



parliament requires not only that useful service is provided to clients, but that the service is efficient and provides value for money—state education is essentially an oligopoly in terms of markets, therefore, changes in client demand do not accurately reflect efficiency. The essentially 'free' nature of state education to the client means that any assessment based simply on consumer satisfaction provides a poor guide to quality, because a 'free' service provides no opportunities to assess the elasticity of demand for that service.

Second, client-led accountability systems do not provide direct feedback as to why a service is providing or not providing quality service—that is, the client information does not contain data on the characteristics of quality to which demand is responding. This is true even in unconstrained markets. In fact, producers of goods and services in competitive markets find it more—not less—important to undertake substantial product and service reviews. Consumer product testing is a very substantial industry, particularly in highly competitive markets.

Third, the management—as opposed to the inspection—of quality requires continuous review throughout every aspect of development, production and delivery. A key feature of the Japanese approach to management is the assurance of the quality of the finished product by managing quality at every stage of production; and after delivery, in terms of continuing client satisfaction. It does not rely on inspection at the end of the production process to indicate that a product is defective—something, which incidentally, management has no interest in producing—and management does not rely on a decline in demand, as customers turn to other manufacturers models, to tell them that their product is of inferior quality.

### **Accountability or Development: Two Masters or One?**

There is an interesting duality in the concepts of accountability and development applicable to education systems. Accountability refers to the *proving* of quality and development to the *improving* of quality. Clearly, systems based on input controls and those with a specific focus on outputs address the issue of accountability directly, although from quite different perspectives. However, they pay little attention to the contribution that accountability processes might make to the development needs of an organisation. The advantage gained by adopting a quality management perspective is that of binding the process of accountability and development into the one structure. Whilst it is important for operational reasons to maintain a distinction between accountability and development activities, it is also important for the overall effectiveness of an organisational unit that accountability and development are seen as complementary to each other. More importantly, accountability systems need to be established in a way which maximises their contribution to the development of organisational units.

## **Strategic Planning for School Development**

Over the past five years all Australian state education systems have developed strategic plans for the implementation of policies and programs. In the South Australian system such systemic plans are further augmented by development and operational plans for each of the directorates in the Department. During 1990 all schools established plans for their own development. These are known as *school development plans* (SAED, 1989, 1990a). School development plans are a statement of the key things which the school wants to change or improve (objectives); how these things are to be achieved (strategies); and what the impact will be (outcomes); to improve education for students. A school development plan is only one aspect of the school's total planning process. It describes the school's priority areas for development, but it does not encompass the on-going maintenance activities of the school. The objectives as they are identified in the school development plan arise from two sources: the programs and policies which the Education Department has mandated for implementation in schools, and the particular aspirations of schools and their communities. Action plans are developed by the school to address each of the objectives stated in their school development plan. The processes by which the school development plan identifies its objectives and implements them are crucial to the success of the plan. The objectives themselves and the implementation process must focus as directly as possible on increasing educational outcomes for students.

The systemic strategic plan and directorate plans, along with school development plans, have a three-year time horizon and each is rolled-forward after their annual review of progress.

## **Links to School Restructuring**

Education reforms in Australia, New Zealand, North America and United Kingdom in the last two or three years have led to an increased emphasis on site-based management and the devolution of funding to schools. These reforms have sought to give schools greater control over the way in which they operate. This includes greater devolution of powers to schools over budgets and an associated increase in authority for site-based management. The most far reaching of these reforms have been in New Zealand and the United Kingdom.

Experience in several countries has indicated that teachers have been somewhat over burdened by the trend which emerged in the 1980s of expecting them to re-invent the wheel of curriculum anew in every school and classroom. The present reforms have, therefore, also attempted to redress this situation by emphasising broader based collaborative and system-wide curriculum development initiatives.

### Performance Indicators in Education

The literature on performance indicators in education makes the distinction between those which are *performance* indicators, and those which are *education* indicators. This perspective is particularly prominent in the North American literature. However, there is good reason to treat all indicators in education as performance indicators. The quality management approach described in earlier sections of this paper is based on the perspective that within any part of the education system an operational unit or an individual worker is simultaneously a client of the services provided in support to them from other parts of the system and a producer of services or products to other parts of the system. Hence, at any one point in the structure the operation of a unit or an individual can be viewed as a performance in the context of the requirements of their clients.

Indicator systems in education have been proposed in order to address a range of different issues. The main uses that have been suggested for them include:

- assessing the impact of educational reforms
- informing policy makers of the practices that are most effective for improving education
- explaining causes of conditions and changes
- informing decision making and management
- stimulating and focussing effort
- ensuring accountability
- defining educational objectives
- monitoring standards and trends
- forecasting future changes.

Each of the above uses of indicator systems in education is discussed in more detail in Cuttance (1989). Oakes (1986) has suggested that there are five types of information that indicators must provide at the operational level. These are:

- performance information in relation to the achievement of goals and objectives
- information on the features of the system that are most important in achieving particular goals and objectives
- policy relevant information
- problem orientated information
- information on *central* features of the system.

Table 1 cross-classifies these five types of information against the nine purposes set out earlier for education indicator systems. The five types of information can be sub-divided into those which are derived from *evaluations* of the system and those which are derived from routine *monitoring* of the system. The category of 'policy relevant information' is applicable to information from both evaluation and monitoring sources. Also, a certain amount of 'problem oriented information' will be made available through the diagnostic and formative



components of formal *evaluation* activities, but its main source will be from *monitoring* activities in the system. From table 1 it is clear that some of the purposes put forward for education indicators draw more heavily on *monitoring* activities and others draw more heavily on *evaluation* activities. Thus, an indicator system which encompasses all nine purposes would need to gather information from both formal and informal evaluations and from routine monitoring of the system.

Table 1 Purposes of education indicator systems and the types of information they need to provide

Purpose of Performance Indicator	Type of Information Required				
	Evaluation		Monitoring		
	Achievement of goals & objectives	Features responsible for performance	Policy relevant information	Problem orientated information	Information about central features of the system
Assessing impact of reforms	X	X	X		
Assessing most effective practices	X	X	X	X	
Explaining causes & conditions	X	X	X	X	X
Decision making & management	X	X	X	X	X
Stimulating & focusing effort	X	X	X	X	X
Ensuring accountability	X		X		X
Defining objectives		X	X		X
Monitoring standards & trends			X	X	X
Forecasting future change			X	X	X

The purposes of performance indicators described above are subsumed under the more general functions of quality assurance, development and accountability in education systems discussed earlier in this paper.

## Strategic Information to Assist the Development of Schools

The review program conducted by the South Australian Education Review Unit aims to:<sup>1</sup>

- provide direct feedback to individual schools and units on their education development plans, and in the broader context of system wide reviews
- provide timely information on the effectiveness of educational practice and the adequacy of the services provided.

School reviews contain four components:

- A review of progress against the school development plan. Both the effectiveness of the strategies followed by the school in achieving the objectives set out in its plan, and the progress that it has made towards achieving those objectives are reviewed.
- An audit of selected Education Department regulations and requirements. Regulations and requirements in the areas of general school management and organisation, curriculum management and policies, professional obligations of school staff to students, and school-community relationships are audited.
- A school-initiated element. This provides the school with an opportunity to request assistance of the review team in the review of a particular issue that is of interest and importance to the school.
- An element of a systemic review. Systemic reviews include *effective practice* reviews, and program and policy reviews. Effective practice reviews are discussed further below. Program and policy reviews focus on the delivery and effectiveness of particular services and policies. Program reviews may evaluate a service directed towards the entire student population or, more frequently, to one or more groups within it. Program and policy reviews typically take the form of program evaluations which gather evidence across a number of schools and in other parts of the system also responsible for delivering that program or policy to schools. They involve a consideration of both the effectiveness of the program as it is delivered in schools and the support provided to schools by other development and service units with a responsibility for that program or policy. (SAED, 1990b,c, 1991)

## Effective Practice Reviews

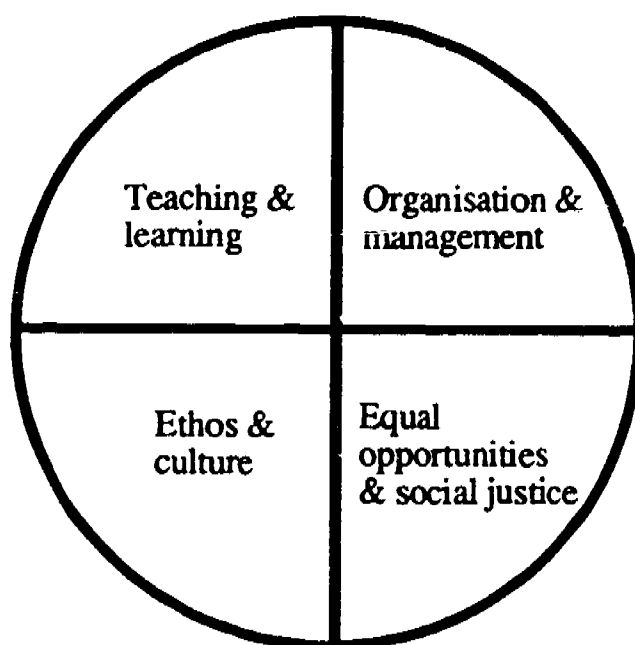
The primary purpose of this type of review is to report on performance with respect to particular practices across the system as a whole. Effective practice reviews are conducted in four *domains*: teaching and learning, organisation and management, ethos and culture, and equal opportunities and social justice. Each

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<sup>1</sup> The Education Review Unit is not responsible for student assessment. The Curriculum Directorate is currently developing new procedures for assessing students—a series of six 'attainment levels' from year 2 to year 10. The ERU does, however, incorporate assessments of the quality of student work in schools in its reviews of the performance of schools.

domain addresses five to eight *areas* of school activity. Three to five *aspects* of performance have been developed to report on each of the areas of activity reviewed. In total this provides about 100 profiles of performance across the four domains of practice. In general, only one of the four domains of effective practice is reviewed in each school.

Figure 1 The four domains of effective practice reviews



The effective practice instruments were developed by teams of school-based teachers, principals and superintendents. In drawing up the statements of effective practice in each of the aspects to be reviewed these teams drew upon the research literature in the relevant area, the Department's guidelines and policy statements relevant to that aspect, and their own experience as educators in schools. The instruments were then trialled in various reviews and revised before being incorporated into the review process in schools. Annual revision of the instruments is envisaged. Appendix 1 provides a listing of the areas and aspects of practice and functioning in each of the four domains and Appendix 2 provides an example from the effective practice instruments for each of the four domains.

Issues raised in developing the instruments reflect some of the current debates about different forms of student assessment. In particular, the approach adopted in writing the statements of effective practice parallel many of the characteristics associated with authentic pupil assessment (Shepherd, 1991).

- Gathering information with the instruments is judge or observer intensive.
- Sampling is used to reduce overall costs—the system rather than the school is the unit of analysis.

- They have a less distorting effect on school practice than check lists of practice.
- Both processes and outcomes are observed as part of the review.
- The trade off between depth and breadth of practice observed had to be taken into account in their development.
- The instruments are not meant to provide prescriptive or comprehensive statements of the characteristics that might be associated with all effective practices, rather they describe some of the key characteristics that one would expect to observe in effective teaching and learning situations.

The gathering of the information in effective practice reviews is context sensitive—in particular, consideration is given as to whether or not it is appropriate to expect a particular practice to occur in the situation being observed.

The ERU monitors and revises its descriptions of effective practice in light of feedback from practitioners in schools and from an evaluation of the relationship between various practices and student learning. The latter builds on departmental approaches to student assessment to evaluate the relative importance of different practices for the educational development and progress of students.

The information obtained from effective practice reviews is used to diagnose weaknesses and monitor trends in the education system as a whole. Further, it provides summative information on the standard of practice that exists in the system. This information provides important input into policy formulation, and operational decision making and resource allocation. It also contributes to the annual revision of the Department's systemic *Three Year Plan*.

The information obtained in effective practice reviews is also linked to departmental programs and policies. A two dimensional matrix with programs and policies on one axis and effective practice indicators on the other establishes the linkage between individual aspects of effective practice and particular programs and policies. Thus, effective practice reviews provide an on-going basis for monitoring the effectiveness of individual programs and policies. However, the range of effective practices reviewed is broader than the set of systemic programs and policies. That is, various aspects of practice that are not specifically addressed by programs or policies are also monitored.

The effective practice review instruments are also being prepared for use in other contexts in the system. In particular, some schools have expressed an interest in using them as an internal screening device, and other schools have expressed an interest in using them in staff training and development sessions.

## **Reviewing Performance of School Practice and Functioning**

### **Data Collection in Schools**

In each school review only one domain of effective practice is reviewed. Information is collected from staff and a cross-section of parents and students, mainly through interviews and discussions. In addition, relevant documents may be examined. However, direct observation also plays an important part in gathering information. Observation by the review team of the general environment of the school, student recreation and study areas, classrooms, staff-rooms, etc, is undertaken. Depending on the domain of practice being reviewed in a particular school, discussions may also be held with specific individuals, such as those responsible for the financial management of the school, those with key responsibilities for curriculum development and implementation, etc. The types of documents that may be perused as part of the information gathering exercise include: school newsletters, parent and staff information booklets, teacher work plans, student records and reports, minutes of school meetings, etc.

The domains of management and organisation, ethos and culture, and equal opportunities and social justice use the school as the unit for reporting. Reporting on the domain of teaching and learning is based on the classroom as the unit of observation. This latter domain involves considerably more classroom observation than the other three domains. Typically, in reviewing teaching and learning review team staff observe in classrooms for between half an hour and fifty minutes on each occasion. They involve themselves in the classroom to the extent necessary to observe the practices being reviewed. This may include direct interaction with children in the classroom, with groups of children, with the teacher, etc. Normally, some discussion take place with the individual teacher before the observation period and again after the observation period. The purpose of the observation is to gather information about normal practice in schools. No special preparation is required by teachers. The observation is not linked to any process of teacher appraisal. Hence, no feedback is given about the general effectiveness of the teacher, although the review team member may discuss some aspects of practice that were observed during the session with the teacher, if the latter so desires.

Since the effective practice reviews have the specific purpose of improving the quality of practice and functioning in schools, the recording of information is based on categorical statements that relate to the extent of the implementation of the practice as an effective practice in that situation. Three decisions have to be made by the observer about each aspect reviewed. The first is whether or not there is sufficient data on which to make an assessment of the effectiveness of the practice associated with that aspect. The second decision is whether the practice in that aspect is regarded as effective (E) or not effective (N) as described by the description in the effective practice indicator statement. The third decision requires



a distinction to be made between levels of effectiveness (or ineffectiveness). The reviewer assesses whether the practice observed is regarded as effective at an outstanding level (EO) or at a satisfactory level (ES). Similarly practice which is regarded as ineffective is classified according to whether or not this has been recognised (by the teacher or the school) as an aspect of functioning which requires development and for which some planning for improvement is in hand (NCP), or whether that aspect of functioning has not yet been acknowledged as requiring improvement (NN).<sup>2</sup>

An annual report based on the observations of school reviews in each of the domains is published. These reports do not identify individual schools or teachers. They highlight aspects of practice that have been found to be particularly effective and make recommendations where performance is considered to be weak generally in schools, or where the practice appears to be weaker in schools serving particular sections of the student population. These recommendations may lead to more indepth reviews of particular policies or programs which are responsible for supporting those areas of practice found to be weakest. Such further reviews may evaluate a particular program or policy, or a group of them, or they may focus on particular aspects of functioning and practices in schools. The analysis assists the effective utilisation of systemic resources for improvement in key areas and thus supports schools in their function of providing high quality education for students.

## **Findings for the South Australian Education System**

### **Context**

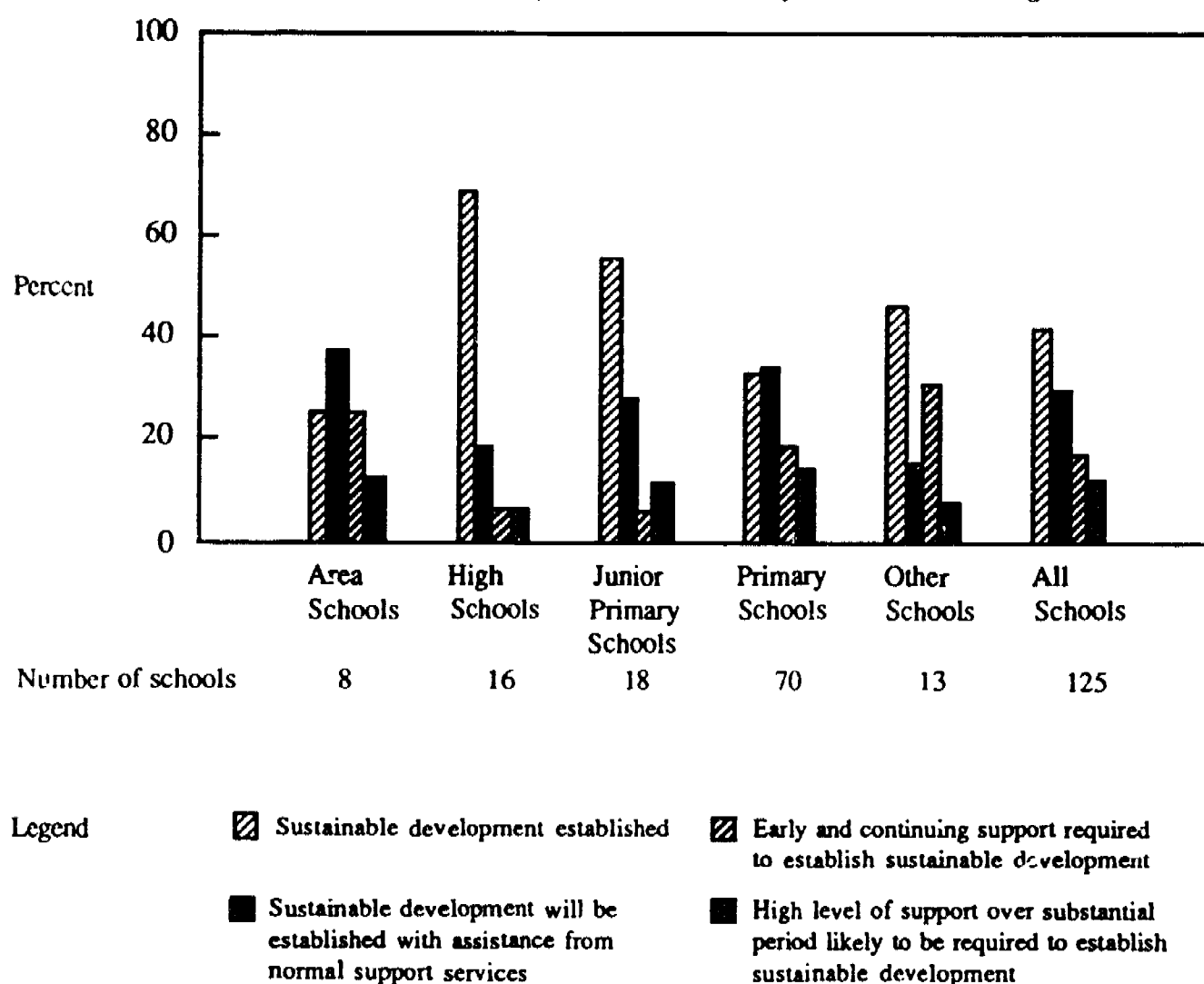
The South Australian state education system is divided into five operational areas and there are three central directorates (Resources, Personnel, Curriculum) plus the Education Review Unit. There are approximately 738 schools in the system: about 100 secondary schools serving years 8–12, 54 country (area) and urban Reception – year 12 schools, 424 primary schools serving Reception – year 7, 77 junior primary schools serving Reception – year 2, 67 schools for special students, and 16 schools for Aboriginal students.

There are approximately 185,000 students, 16600 teaching staff, 4700 other staff, 300 out of school support staff, and 900 staff in administration in the system.

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<sup>2</sup> Note that the categorisation of effectiveness reported for the data reported in later sections of this paper differs from that described here. The recording schema has since been revised in line with the above.

The assessment of performance for the teaching and learning domain is undertaken by observers independently for each classroom they visit. The assessments for the other three domains are arrived at through discussion and consensus among the members of the review team.

Figure 2 Development of schools by level of schooling<sup>†</sup>

<sup>†</sup> Because of the small number of schools reviewed at some levels of schooling, care must be exercised in interpreting the differences in these assessments. The estimates should be read as indicating the range of variation between different types of schools. These are aggregate group statistics, therefore, they do not indicate the assessment pertaining to specific schools in a group.

The Education Review Unit review program commenced in term 2 1990. One hundred and twenty five schools were reviewed during terms 2–4. In the process of gathering information in these reviews, approximately 1500 teaching staff, 300 ancillary staff, 2000 parents, and 4000 students were involved in discussions and individual interviews. In addition, over 500 teaching lessons were observed. The overall assessment from the reviews indicated that 42 percent of schools reviewed were well advanced in terms of their development planning and were able to effectively manage and sustain their own development. Thirty percent were found to be able to establish the necessary structures and processes for sustainable development with the normal assistance and support provided by area and system programs. Seventeen percent were found to be in need of early and continuing support to establish the necessary structures and processes for sustainable development. Twelve percent of schools were found to be in need of substantial support over a prolonged period in order to establish the structures and processes for sustainable development. Significant leadership and organisational

development and change is likely to be necessary to establish the basis for effective development in this latter group of schools.

### **Domain: Teaching and Learning**

The following analysis is based on information collected by means of observation in 80 randomly selected classrooms, and through discussions with the teachers in whose classrooms the observations were undertaken. Practices were found to reflect the indicators of effectiveness either *very closely* or *fairly closely*, in 60 percent of the classrooms observed for 20 of the 21 aspects. Appendix 3, provides a graphical summary of the findings for the aspects of practice reviewed in this domain.

#### **Highly Effective Practices**

Practices were found to be effective or highly effective in 80 percent or more of the classrooms in five aspects. Each of these is discussed below.

##### *Classroom Interpersonal Interactions*

There was evidence of sound interpersonal relationships in 84 percent of the classrooms amongst students and between the teacher and students. Interactions were characterised by respect, interest, sensitivity, consideration, trust and humour. Effort and success were acknowledged and instances of disruption or conflict were dealt with constructively.

##### *Home/School Information Flow*

Findings in this aspect indicate that formal and informal structures for parents and teachers to share information were used effectively in 84 percent of the classrooms. In these classrooms, teachers were successfully communicating information about important aspects of schooling to parents and were managing sensitive information conveyed by parents in appropriate ways.

##### *Teacher/Learner Relationships*

Relationships were seen to be highly effective in 47 percent of classrooms and effective in a further 38 percent. There was evidence of teacher's concern for students and of encouragement for them to do their best. These classrooms demonstrated a positive approach to learning and teaching; expectations were appropriate and clear. Teachers conveyed their interest in students as individuals.

##### *Student Attitudes and Enthusiasm*

Students set to work quickly, concentrated on the task at hand and made an effort to produce work they could be proud of. They demonstrated, enthusiastic and confident approaches to learning activities to a high or very high degree in 81 percent of classrooms.

### *Monitoring and Reporting Progress*

Teacher practices in this aspect were found to be highly effective in 23 percent of classrooms and effective in a further 58 percent. In these classrooms teachers monitored student behaviour and participation and took appropriate steps to ensure that an effective working environment was maintained. These teachers kept useful records of student progress and had developed appropriate ways of reporting to students and parents about this.

### *Practices Requiring Development*

In one of the 21 aspects more than 40 percent of classrooms indicate practices which were seen to be ineffective. In several other aspects, however, review findings suggest that there are matters which warrant attention.

### *Curriculum Monitoring and Review*

Findings indicated that the curriculum monitoring and review practices in 51 percent of classrooms do not meet the described criteria of effectiveness. There was no established process for checking that aims and objectives are appropriate to students or for monitoring the effects of curriculum content, resources and use of time on student learning in these classrooms. The absence of a systematic process of monitoring and review limits the extent to which teaching can be modified to take account of students' individual differences. It also inhibits the extent to which parent and student perceptions of the effectiveness of learning can be taken into account when learning programs are being designed.

These findings are consistent with information that was provided by principals during the review of the Curriculum Authority and Responsibility policy.

### *Other Aspects for Attention*

There were four other aspects of practice which came to attention. These were:

- quality of teaching skills
- organisation for learning
- appropriate curriculum resources
- use of learning resources.

In these aspects, practices in more than 60 percent of classrooms were rated as effective, but in 6–10 percent of classrooms practices were rated at the lowest level of effectiveness.

The indicators of effectiveness in the first two of these aspects refer to the range of teaching approaches and groupings that are used

- to provide appropriate sequencing and continuity of learning for students
- to make opportunities for teachers to model and students to practise a range of learning strategies
- to facilitate high quality teacher interaction with students, so that all students are involved in making decisions about their learning

- to give practical expression to concepts such as the valuing of difference, exploration of ideas, excitement in learning and the pursuit of excellence.

Indicators of effectiveness in the latter two aspects identified above refer to the range of resources, both human and material, in the school and the wider community, which are used to ensure that learning experiences adequately support differences in student abilities, learning styles, interests and cultural backgrounds.

### **Summary**

The review found that for most aspects of classroom functioning, practices were effective in the vast majority of classrooms, and in a considerable proportion, were very effective. The findings indicate that procedures for the systematic monitoring and review of the curriculum need further development in at least 50 percent of classrooms. There is some evidence to suggest that practices which effectively support students' development of learning strategies are less evident than those which support their social development. There is also an indication in the findings that more attention should be given in some classrooms to the use of a wider range of resources and teaching approaches to acknowledge and support student differences.

### **Management and Organisation**

This analysis is based on information collected in a random sample of 17 schools. More than 50 percent of schools were found to match the descriptions of this effective practice instrument either *very closely* or *fairly closely* for 17 of the 30 aspects reviewed.

#### **Highly Effective Practices**

##### *Grounds, Facilities and Equipment*

No school in the sample was assessed as being weak in this aspect of effective practice. Eighty percent of schools were assessed to match the indicator *very closely* or *fairly closely*. This is an aspect of schools where most have effective council and staff sub-committees that regularly report on grounds development and maintenance and on financial activity within the school.

##### *Inclusive Attitudes and Practices*

The indicator statement for this aspect is of a general character and many of the individual factors within the aspect are explored in more detail in the domain of equal opportunity and social justice. In approximately 75 percent of schools the differences between individual students is recognised and valued. Enrolment is open to students regardless of cultural or linguistic background, physical or intellectual impairment (save those directed by the Director General of Education to attend a special purpose school/unit) and processes to access appropriate support are operative.



### *Staff Leadership Positions*

In approximately 70 percent of schools the practice matched the indicator statement for effective practice either *very closely* or *fairly closely*. Leadership positions have been allocated to meet the objectives of the school development plan. However, the success of the training and development associated with these positions to achieve planned objectives was commented on as one of the less effective practices in these schools.

### *Management of Resources Beyond the School Environment*

In approximately 60 percent of schools the education program is planned sufficiently in advance so that members of the school community are aware of approaching events, costs and the organisational requirements. In these schools the principal is aware of Education Department processes, has an effectively functioning network of appropriate resource contacts, and uses this network to the school's advantage.

### *Working Environment*

Approximately 64 percent of schools have staff who show high esteem and who work collaboratively to achieve high standards. The staff take responsibility for the success or failure of their projects and effective co-operation is clearly evident.

### *Budget Management*

Approximately 60 percent of schools have practices that *fairly closely* match the effective practice. Structures and processes relating to financial management are in accord with the document *Financial Management in Schools*. In these schools a degree of financial flexibility is achieved and regular reviews are built into the budget cycle.

## **Less Effective Practices**

### *Internal School Review*

The lowest degree of effectiveness was evident for this aspect of practice. School development planning is currently in its implementation phase, and may schools have little experience in conducting internal school reviews. By the end of 1991 it is expected that all schools will have conducted an internal review as part of the roll-forward of their school development plan. This experience will provide the basis for on-going learning and subsequent improvement in practice.

### *Curriculum and Program Evaluation*

No school was assessed as having matched the description in the indicator statement *very closely* or *fairly closely*. This assessment is consistent with the information provided by the review of the Curriculum Authority and Responsibility policy. The inclusion of the statement "that staff are continuously involved in

reviewing classroom practices and programs" indicates the high level of total school involvement that is required in this aspect of practice. A high degree of trust is necessary before staff feel comfortable with the involvement of peers in the assessment of their classroom practice.

### *Staff Supervision and Support*

No school matched the description of practice in the indicator statement *very closely* in this aspect. The key features of this aspect are a school supervision and support policy, with encouragement to try different options, and the linking of staff supervision to the achievement of school development plan objectives. The reviews noted that school staff are waiting for the development of the Department's policy on performance appraisal before developing school-based practices. The Department's policy should be developed at an early opportunity. The current standard of practice indicates that major training and development will be required, as the base level of practice is weak and provides little to build on.

### *Training and Development*

Sixty five percent of the observed practice matched the indicator statement *in some respects*. This suggests that although appointments are being made to the new leadership positions, they are not yet resulting in effective change. The successful implementation of change requires multiple strands within the schools training and development program. An essential component is leadership knowledge of individual teacher performance to facilitate counselling to increase skills for career advancement prospects. The assessment above of weak practice in the aspect of staff supervision and support strengthens this diagnosis of the problems in this aspect of practice.

### *School Management Planning*

The weak assessments for this aspect are congruent with the large number of recommendations relating to decision making and management processes in school review reports. There may have been a lessening of emphasis on on-going management activities of a consequence of the increased emphasis on school development planning over the past year. The more effective principals in schools continue to manage curriculum maintenance but others are not consistent in their articulation of these management necessities.

### *Curriculum Review*

No school was assessed as matching the indicator statement *very closely* which is consistent with the findings from the Curriculum Authority and Responsibility review. The indicator statement specifies that the curriculum must be consistent with the school's vision statement. The development of vision statements receives a high rating elsewhere in the review of this domain. However, it appears that few schools assess the congruence between the vision statement and current practice when determining their priorities for school development.

## Summary

The performance of management in the use of resources beyond the direct school environment and of buildings and grounds is highly effective in most schools. Aspects of management relating to staffing and students are performed effectively in more than half of all schools. Some specific aspects of general management—particularly those relating to decision making, staff training and development and the supervision and support of staff—require attention in more than half of all schools. Aspects of management relating to school planning—particularly, context setting for planning, school management planning and internal review processes for school development planning—also require early attention in more than half of all schools. There is a weakness across the system in relation to aspects of curriculum management— curriculum review and relevance, and program evaluation.

## Discussion

The system of school and system review that has been established in South Australia aims to directly address and integrate both development and accountability issues. The review structures and processes have been constructed in the light of the requirements of quality management, as opposed to quality control, systems.

Systemic performance indicators of *effective practice* have been developed as one component of the broader review structure. These provide the basis for monitoring the effectiveness of practice and functioning in schools and other organisational units in the system. The effective practice indicators are designed to provide a basis for monitoring the system's programs and policies as they are delivered to students.

Information from the effective practice performance indicators is available for only a small number of schools thus far. The information available, however, suggests certain weaknesses and strengths in the system.

The assessment of the information from the domains of *teaching and learning* and *management and organisation* indicates that the effectiveness of practice and functioning in the latter domain is weaker than in the former. The information available from the performance indicators for both domains indicates that strengths are found in the non-curriculum aspects of schooling and that future attention in the development of schools needs to be directed towards curriculum issues: particularly, planning, maintenance, development and review of curriculum and programs within schools; the organisation and strategies for the effective use within schools of resources to deliver the curriculum, including staff training and development; the management and review of development in schools.

Once the parallel analyses of the effectiveness of performance in the other two domains of *ethos and culture* and *equal opportunity and social justice* have been completed the information will be utilised for the following purposes:

- to assess which programs and policies may be performing at less than satisfactory levels
- to indicate areas of strength in the delivery of high quality education to students
- to indicate the aspects of practice and functioning in schools that require priority attention, and therefore
  - appropriate targets for school improvement to be addressed through school development plans and the strategic plan for development across the system
  - the areas of priority for staff training and development
- the assessment of progress towards the attainment of individual objectives on the systemic Three Year Plan.

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